

THE FARMER & GARDENER; AND LIVE-STOCK BREEDER & MANAGER.

CONDUCTED BY J. IRVINE HITCHCOCK, AND ISSUED EVERY TUESDAY FROM THE AMERICAN FARMER ESTABLISHMENT, AT \$5 PER ANNUM, IN ADVANCE.

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BALTIMORE, JUNE 24, 1834.

Vol. I.

THIS publication is the successor of the late **AMERICAN FARMER**, (which is discontinued,) and is published at the same office, at five dollars per year, payable in advance. When this is done, 50 cents worth of any kind of seeds on hand will be delivered or sent to the order of the subscriber with his receipt.

American Farmer Establishment.

BALTIMORE: TUESDAY, JUNE 24, 1834.

HE IS GONE!—THE SOLDIER, THE STATESMAN, THE PATRIOT, THE FRIEND OF MAN,—LA-FAYETTE,—is gone!—Second in War, second in Peace, second in the hearts of every American—he has but retired to another apartment.

"Come expressive silence, muse his praise."

MACHINE FOR APPLYING LIQUID MANURE.

We have observed in our streets, for some time past, a convenient vehicle for watering the streets. It is composed of a trunk made water tight, and placed on four wheels, drawn by a horse. There is an aperture in the top for receiving the water through a hose, from the hydrant; and near the bottom in the hind end of the trunk, is inserted a tin tube, projecting backward beyond the wheels of the car, where it is intersected at right angles by another tin tube, as long as the space wished to be irrigated at one time. This last tube is perforated with a number of small holes, for the emission of water. The short tube which enters the trunk is closed by a valve, to prevent the discharge of water until it is required to be used. When the car has arrived at that part where it is wanted, the valve is opened, and as the horse moves, the water is discharged by the transverse perforated tube—the quantity discharged on any space is regulated by the celerity of the horse's movement. This simple machine is a great labor-saving engine. One man and a horse can irrigate as great a length of street, as ten men could do in the same time by hand.

It has forcibly struck us, that this little contrivance might be turned to an excellent use on a farm, or in a garden, by irrigating garden vegetables, or by applying liquid manure to meadow ground. There are many sources where this kind of manure might be saved, and applied in this way to great advantage. When there are ponds of stagnated water, frequented by cattle and

geese, it becomes charged with animal matter, and the leaves and vegetable matter collected and decomposed in such ponds, renders the stagnated water peculiarly adapted to manuring lands. The urine of animals kept in stalls may, after a proper preparation, be applied in this way. The farmer who suffers this last article to escape, is perhaps little aware of the loss he sustains, as it is one of the most powerful manures we have. If it be properly diluted with about six times its quantity of water, and suffered to stand for ten days or two weeks, to undergo a fermentation; and if it be mixed with the soap suds of the wash house, and pot liquors of the kitchen, it will be found no small item in the list of means for enriching a farm or garden. The difficulty of applying this kind of manure, has commonly prevented its being preserved; and much loss has occurred to the farmer. The little machine mentioned above would obviate that difficulty, at a small expense of time or money.

DESTRUCTION OF THE ELM TREE.—We observe the beautiful Elm trees which adorn the streets of our city are again attacked by the caterpillar, which was last year so destructive to their growth. We believe that tree was not formerly liable to this destructive enemy. Is this a new insect, or rather is its appearance among us new? or is it like the locust, one which has been among us in another form, and is only going on in the round of perpetual change, which all matter is liable to?—We would be obliged to any of the entomologists of our city to give us a description and history of this insect. Entomology is a branch of natural history hitherto too much neglected by farmers. We should be glad to see it receive more attention than has been appropriated to it; though we profess ourselves unable to give it that attention its importance to the agriculturist demands. It would be a good exercise for the farmer to keep a correct description of every such enemy that appears, with its form, habits, &c.

STAATSBURG, Dutchess Co. N. Y. }
June 11th, 1834. }

SIR:—In your Farmer, &c. of the 30th ult. is an account by Mr. Moore of making hay of a plant called Crowfoot. I wish you to inform me if the plant to which he alludes is the same as that of which I send you a drawing. We find it

with us a very troublesome weed, which no animal will feed on. It is extremely acrid, will in its green state raise blisters; and as far as I can judge, by comparing with Pliny's description, is the species said by the ancients to produce the *sardonius risus*. As there are upwards of one hundred species of it, this may not be that to which Mr. Moore refers.

The Gama Grass seed you sent me, though forced, does not show the least disposition to germinate. I have some doubts of their being seeds. They have more the appearance of the joints of the stalk of a culmiferous plant, the seed of which class are uniformly contained in chaffy husks.

Your obt^s serv^t,

MORGAN LEWIS.

J. I. HITCHCOCK, Esq.

We hope Mr. Moore, or some of our southern correspondents, will give us a particular description of the grass alluded to under the name of Crowfoot. The species alluded to and figured by Mr. Lewis, is one of a class in which there are upwards of one hundred different species. In Ireland this kind abounds in all meadows and open pastures, and is esteemed very good pasture for making butter of the best quality, and it likewise forms very good hay;—while in the north of Scotland it is found, as in New York, to be a pernicious weed, and is refused by cattle, unless under the most urgent necessity, when they are pressed by hunger. We are desirous of knowing whether the article alluded to by Mr. Moore, is of the same species as that mentioned by Mr. Lewis, and of that found to be of such different qualities in Ireland and Scotland. If they should prove to be the same, it will form another, among the very many arguments, of the utility to the farmer of studying Botany, and adapting the articles which he cultivates to his climate and soil.

NEW ZEALAND FLAX.—(*Phormium Tenax*)—This plant stands the winter of England. In 1828 only 60 tons, valued at £2,600, were imported from Sydney into Great Britain. In 1830 there were 814 tons, and in 1831, 1062 tons. The flax as prepared by the natives, is superior to any analogous material. Its price in London is from 15 to £25 per ton.—*Gen. Farm.*

PRESERVATION OF SKINS.—J. Stigard, farmer at Tyman, in Hungary, completely preserves raw hides from putrefaction, and restores those that are tainted, by applying to them, with a brush, a layer of pyroligneous acid. They absorb it very speedily, and it occasions no injury nor diminution of their value.—*Receuil Industrielle.*

THE FARMER.

MANUFACTURING OF SILK.

We have just been visited by a gentleman from the land of *perpetual improvement*, who has given us the very agreeable intelligence that a machine has been put in operation in Connecticut for manufacturing Silk; which accomplishes for that article all that his countryman, Whitney, effected by his Gin for Cotton. Every part of the operation, from the cocoon to the production of the most elegant tissue, suited to every kind of wear, such as ribbons, vests, and very superior silk for ladies' dresses, can be manufactured in this machine by the common operators in those trades, without the least difficulty. Specimens of which the gentleman presented for our inspection, had been manufactured in this machinery. The inventor, we are informed, is a young man who was brought up in a cotton factory, and subsequently learnt, and perhaps we may say *he studied machine making*, in the common shop attached to the factory.

There was an Englishman in the neighborhood, who had been weaving the silk raised in Connecticut, for the last eighteen years, with such an apparatus as is used in Europe for that purpose; but it appears he had caught a little of the Yankee notion, and thought his machinery might admit of improvement—he accordingly went to the young mechanic spoken of, and asked him if he could not make him something that would do better than his present looms. The young man, whose name is *Gay*, replied yes, he *guessed* he could, if he knew what he wanted. An inspection of the loom accordingly took place, and the young man went to work.

If our readers had been raised even in the centre of Connecticut, we do not believe they could *guess* how he went to work. He did not go to other shops, to see how others worked—he did not take down the Encyclopedia and count the cogs, and pinions, and teeth, represented in the plates of the machines made use of in that country, where the people presume nothing can be done in the world but by imitating them. No such thing—when this young mechanic goes to study out any new movement in machinery, he turns his eyes to the interior mechanism of his own frame—and on this occasion, instead of proceeding in the way that machinists generally would have done, he set himself down, and began to work his fingers—he observed how many movements he could perform with them, and how the inflections of the muscles operate to produce the several motions, their origin, and insertion at the joints—he then proceeded to the consid-

eration of the wrist, the elbow, and the shoulder, and proceeded to consider all the motions that the several joints are capable of performing, until he discovered a motion which corresponded with the one he desired to apply to his machine, and then he discovered how to apply the power to produce the desired effect—thus proving that,

“The proper study for mankind is man.”

This machine will cause silk to rival cotton in the list of our exportations, and that at no distant day. It has been ascertained that the raw material can be raised much cheaper than cotton, and manufactured at half the expense.

A child of fourteen years old can climb the large white mulberry trees, which are as large as a common sized apple tree, and gather 75 lbs. of leaves in a day,—this is termed a day's work for such a child in Connecticut. At this rate, in six weeks the child will produce 10 lbs. of silk, the reeling will be two weeks work for the same child, making eight weeks work for 10 lb. of silk, which, at \$4 per lb. (the market price,) will be \$40. But it will be remembered that this is from the white mulberry, and those of a large size. If the *Morus Multicaulis* be substituted, which is a shrub that may be kept from 7 to 8 feet high, and produces a leaf when at its full size 10 by 12 inches; while that of the other kind is but little larger than a dollar. It will not be too much to say, that the child can feed three times the number of worms that has been mentioned in the above calculation; and experiment has proved that the same weight of leaves will produce one fifth more silk than the white mulberry.

Admitting this, which no one acquainted with the two kinds of mulberry tree, will be disposed to deny, and the account will stand thus:

6 weeks labour of a lad or girl,	\$6
2 weeks of the same for reeling,	2
8 weeks boarding same at \$1 per week,	8
	<hr/>
	\$16
Allowing the child to gather three times the quantity of leaves as of the other kind which made 10 lb. of silk,	30 lb.
1-5 to be allowed for the <i>morus mult</i> above what would have been produced by the other,	6
	<hr/>
	36 lb.
At \$4 per lb.	4
	<hr/>
Total	\$144
Deduct expenses of labor and board,	16
	<hr/>
Balance,	\$128

It gives a balance of \$128 for the labour of a child of that age for 6 weeks. We have left out of the account the rent of the land, as it would be but of small consideration, and cannot be ascertained.

We think we have said enough (if our statement is believed) to prove our declaration, that silk will in a very few years be produced in this country to supply our own consumption, and as an article of exportation will rival cotton in value, if not in quantity.

Before our readers pronounce upon us that word of awful import, *visionary*, we ask them to wait, and weigh the evidence which two years will produce on our side. We will continue to detail to them the interesting facts as they occur to us.

MANAGEMENT OF SANDY SOILS.—Much depends on the proper adaptation of manure and vegetables to the proper soil—Clay lands have generally been more attended to than soils of a lighter kind—We give below some observations from the Genesee Farmer on the subject, of the proper admixtures of the different kinds of soil, which is a subject of the deepest interest to the farmer, and worthy of all his attention.

[From the Genesee Farmer.]

The best soils are generally of a dark color, with a due proportion of sand, calcareous earth and clay; and it is the business of the farmer, and happily in his power, by judicious management, to preserve its fertility, or if either of those ingredients be in too large or too small a proportion, in some measure to correct the evil.

In the management of clay soils, the great object should be to render them more friable; but in the treatment of soils not sufficiently adhesive, the efforts of the farmer should be directed to rendering them more so. This is to be attained by the application of clay, marl, leached ashes or swamp mud, and by ploughing when the ground is wet.

It is often found that sandy soils rest on clay, so near the surface, that deep ploughing will bring up some of it. Where this is the case, the farmer may gain two benefits by one operation. Two inches of clay turned up and mixed with surface soil, will be equal to a dressing of manure, and every inch gained in depth, furnishes so much additional room for the roots of plants to search for food. If, however, clay is not within reach of the plough, the skilful farmer will find a substitute in the scouring of ditches or some of the substances above named. Green crops ploughed in have been found very great improvers of such soils.

In the management of light soils, I should not recommend fall or winter ploughing, unless it be with a view to destroy worms, for the operation of frost is most certainly to destroy tenacity: but I would recommend ploughing deep in all soils.

It is ascertained that a due proportion of lime in the soil is essential to the production of good wheat, and where this is lacking, the enlightened farmer will endeavor to ascertain whether the deficiency can be supplied without an expense disproportioned to the benefits. In Norfolk, England, and in Pennsylvania, lime has been found very beneficial on sandy soils. In Western New-York, where it can be obtained at a reasonable price, it

would be worth while to make the experiment on a small scale.

ONTARIO.

GAMA GRASS.—This grass has excited so much attention lately, and so much has been said in its favor by those who have tested its qualities by experience, that our scepticism of its great value is under the necessity of yielding, to a considerable degree, at least. It is our desire that the columns of the Farmer should never lead the Tyro astray; we have therefore said but little of this grass, until further proof of its utility should test what has been advanced in its favor, or until ocular demonstration should enable us to speak from our own experience. We have it now growing on the experimental farm of this establishment; and really, it there excels, for the time it has been growing, all that has elsewhere been said in its favor. Not having the gardener's diary at hand we cannot state the precise time that the seed was sown; but an account of the manner of sowing may be seen in the 41st page of our sixth number—where it will be seen that it vegetated in four days; and on Friday last, the grass was ten inches high, and presented the most beautiful appearance of luxuriant vegetation imaginable.

Below we give an extract from a letter from a correspondent of the Southern Agriculturist, who is well acquainted with the value of this grass in feeding cattle; and we will soon give our readers a summary of what is now known of this extraordinary subject. To all appearance, as it now presents itself, it is worthy of a trial, in all dry and friable soils.

OBSERVATIONS on Gama Grass, and its value for feeding Cattle—by William Ellison.

FAIRVIEW, January 4th, 1834.

Dear Sir:—* * * Sundry questions have been submitted to me about it, as whether it would be valuable for milch cows? What kind of land suits it best? Whether, in my opinion, the roots would bear for a number of years such constant mowing, as it appears to be capable of in one season, and the best mode of planting it? Much respecting this grass still rests in speculation; it is, however, in the hand of intelligent and enterprising men, who have given to the public the result of their experiments, and it is needless to repeat what has been already stated. Whether green or dry, I regard it as fully as valuable as corn-blades, for all purposes, and whoever will give milch cows a sufficiency of the latter, will find them increase greatly in milk; and it is as good, when cured, as the best fodder. Whether it will prove as valuable to the country, as some have anticipated, remains to be determined by experience. I think its value will mainly consist in furnishing the means of permanent grass lots, or plats, or meadows; as it will be very troublesome to extend it over extensive fields, like clover and some other grasses, from the difficulty in collecting seed. For lots and meadows of a few

acres, I think nothing we can plant, will be more productive and valuable. Alluvial soils will suit it best, and it thrives best, I think, in all lands having a clay bottom, whether alluvial or upland. It will grow in all lands, that will produce corn, but will stand greater extremes of wet or dry than the latter. The distance proper for planting it, has been already stated, and will be, I conclude, a matter of choice to the cultivator. Squares of eighteen inches or two feet according to circumstances, are the most convenient distances. In rich alluvial land, or high land highly manured, squares of two feet, in two seasons, will be nearly, if not entirely filled, with the mass of blades. The seed may be planted as soon as gathered, and the young plants will acquire sufficient strength to withstand the winter; but unless planted then, January is the best time. The roots may be planted out at any season, when there is sufficient rain or moisture. The last inquiry—what number of years the roots can stand repeated mowing—is a matter of conjecture. I have already stated, that I think a lot of it, would last a man, during his life, and might be transmitted to his posterity, and I think so yet. The standing complaint against it here, is the difficulty of destroying it when firmly rooted. All entertained prejudices against it on that account, and some had determined to commence active hostilities against it, and extirpate it, if they could, until informed of the uses, to which it might be applied, and they have concluded to treat it as a friend, instead of regarding it as an enemy. About three miles lower down on the creek, on a very old plantation, there is more of it to be found, than on any place within my knowledge; some part of it has been turned out, for some years, and exposed to stock, and kept constantly eaten down, and yet the roots maintain their ground. If they will bear such severe cropping by stock, I should think the grass blades would scarcely destroy them. On my own place there are bunches, whose roots spread out four feet in diameter. These bunches have become annular, the centre of the mass of roots producing but thinly; from the roots there becoming dry, decayed and woody, but nothing more is necessary than to tear them to pieces with any thing that is most convenient to produce new vigour and productiveness. I have disturbed some of these old bunches, and torn them to pieces with the grubbing hoe; and where these old callous roots were, I find a young and vigorous growth of roots and blades. A plantation of it that began to exhibit symptoms of decline, might, in my opinion, be regenerated and renewed, by running through it with a strong coulter, drawn by as much power, as might be necessary, in different directions, and tearing the old roots to pieces.

High wrought expectation seems to be formed respecting it, and whether they are to be realized or not, time only will shew. There is a fascination in novelty which often leads to splendid dreams and extravagant calculations. Enough has already been published respecting it, to shew, that rightly managed, it will prove of very great value to Southern agriculture; if we even make large deductions from the estimates that have been made.

The following observations may be serviceable to those who live near to where this grass is to be found, and are not good judges of the seed. The

sound seeds have the eye close set, firm, hard and glassy, and generally dark coloured. Such as have the eye pale, soft, and yielding to the pressure of the thumb nail, are false, and in such as have the eye pushed out, or protruded from the surface, although dark, the grain will appear to be black and blasted.

[From the Southern Agriculturist.]

SUGGESTIONS relative to the use of Ashes of Salt-Marsh as a Manure; by N. Herbmont.

COLUMBIA, (S. C.) Dec. 2, 1833.

Dear Sir:—It would be very idle, at this time of day, to say to the public that manure is an improver of land, and that we should attend to this in our agricultural country; but it may not be useless to point out one of the most abundant sources of manure in this country, which has been almost, if not altogether neglected.

In Holland, and the neighboring countries, a manure is prepared of such a value that it is a very considerable article of commerce, and is transported, even by land carriage, to a very great distance, probably one hundred miles or more. A proof of the value of this manure is, that it has been in use, and thus carried abroad for a century, or probably a much longer period, and that it still continues to be used more and more extensively. Another proof of its value is that a person in the Netherlands has lately formed an establishment to compound a manure in imitation of the "Dutch ashes," (the manure here alluded to) and has obtained a patent. His compound is made of refuse bituminous pit-coal with common salt, and I think carbonate of lime. These ingredients being reduced to a coarse powder are made into something in the form of bricks, and burnt, when it readily falls to powder again, and thus forms the imitation of the "Dutch ashes," and he even pretends that the improving properties of his ashes, are superior to those of his model. The "Dutch ashes," called in France, "*Cendres de mer*," (sea-ashes) are procured by burning peat which is salt or brackish. These ashes are found very beneficial in most kinds of crops, and are, as I have stated above, carried to a very great distance, perhaps to a greater than any other manure in any part of the world. This is an indubitable proof of the very high estimation in which it is held. Now, I have said that we have most abundantly the materials for it.

What is the peat which is so valuable in Holland, and in what does it differ from our salt-marsh? It seems to me that the peat of Holland was once salt-marsh, like those every where on low flat lands bordering on the sea, and that the greater decomposition of the vegetable matter that composes it can be the only, or at least, the chief difference between them. Now, it is very doubtful whether this peat is superior to our salt-marsh for the purpose of being converted into ashes for agricultural uses. The salt-marshes contain the same vegetable and animal matter, the same earths, salt, shells, &c. as are most probably to be found in the Holland peat. We have, then, on our sea-board, and for a considerable distance inland, a most inexhaustible source, not only of manure, but of wealth to the enterprising persons who would make it a business to dig and burn this matter, and thousands of boat loads might be

sent yearly as high up the country as the navigation of our river would permit, or as far as our rail roads may extend. Surely, whatever is so highly valued in Europe must possess a relative value here, and what can be more desirable in this country than to render our cultivated land more fertile, instead of being turned out as old fields, which are a disgrace to any agricultural country? Situated as I am in the centre of the State, it is distressing to witness the continued emigration of our citizens to the new States, by which the prosperity, the wealth and the welfare of the State must necessarily be impaired. With all the means within ourselves of rendering our country a real earthly paradise, shall we suffer it to become a desert? Will no patriotic gentleman make some exertions to prevent this by giving the most valuable example by which they, their posterity, and their country may be not only saved from nearly utter ruin; but improved in wealth, population and power? Our climate and country are generally healthy, some of our soil is very fertile, the whole susceptible of improvement, and, to attain this most important object, scarcely any thing more is necessary than to will it. I assert it without fear of efficient contradiction, that the territory of South Carolina, by its aptitude for agriculture and commerce, is, or may be rendered adequate to the support, in abundance and happiness, of a population at least tenfold its present one—and yet it is suffered to dwindle to a mere wilderness.

I am, very respectfully, dear sir,
Your obedient servant,
N. HERBEMONT.

[From the Gardener's Magazine.]

THE RELATIVE DEGREES OF EFFECT ON VEGETATION OF SEVERAL SORTS OF MANURE.

In making a few remarks, in the way of answers to these queries, I shall arrange the manures included in the list referred to according as they appear to me to deserve precedence by their effects on vegetation, placing the most powerful or active first, and confining my remarks to those sorts of which experience enables me to speak with some degree of confidence.

1. "*Night soil not dry.*" This, although the most disgusting of the ordinary manures, is, perhaps, the most powerful. It is not only active, but more permanent in its effects than some others of the active manures. When desiccated, or rendered dry, it is less powerful in its active qualities; these being partly neutralised by the lime used in drying it. In this shape, however, it is less repulsive in its application, and as permanent in its effects.

2. "*Pigeon or Poultry Dung*" forms a very powerful manure in raising excellent crops of turnips in the fields; but its effects will not reach through an ordinary farm rotation.

3. "*Velches, &c., ploughed in.*" Under this article may be included all sorts of green manure. Amongst the most active plants employed as manure, I have found the [wild species of the genus] *Sinapis*, ploughed in fresh in the bottom of turnip drills, at the rate of twenty tons per acre. The produce brought by auction £12, while the rest of the field, manured with twenty tons of farm-yard dung, brought only from £9 to £10 per

acre. Other weeds such as nettles, thistles, ragwort, &c. produce crops superior to farm-yard dung. Potato stems, ploughed in, on clover lea for wheat, I have found to produce crops exceeding by two bolls per acre in quantity, with more proportionate weight of straw, the other parts of the same field manured with farm-yard dung, but otherwise under the same circumstances. The stems from three acres of good potatoes will manure an acre for wheat to much better purpose than fifteen tons of farm-yard dung, the usual quantity allowed in that part of the rotation: clover after wheat being the crop which generally precedes fallow. Under the head of "green manure," I may mention an experiment I this year made with pea-straw converted into dung without the aid of cattle. Having something of that sort on hand, about the middle of last May, and being in want of some loads of manure to finish a potato field, I had the peas threshed at the mill, and the straw and chaff carried to the side of the potato field, and made up like a large hot-bed, giving each layer of straw an ample watering. Fermentation soon commenced; and, by the fifth day, the mass was so far decomposed as to be easily filled into the carts. The effluvia in filling was almost intolerable. It was in this state laid in the bottom of the drills; the sets of potatoes were planted above, and the earth ploughed over the whole. Notwithstanding the dry nature of the ground, and the dry state of the weather in the summer months, the part of the field manured with decomposed pea-straw yielded a better return than where farm-yard dung was applied.

4. "*Pig's Dung.*" I have found it a strong manure; but I apprehend it contains something not favourable to vegetation, if applied to any thing like excess in a recent state.

5. "*Sheep's Dung.*" When the sheep are lodged at night in winter in a fold or field, and so managed as to have to walk over the ground where they previously lay, so as to tread in the dung with their feet in going out and in, the beneficial effects will be observable for three years on the poorest soils, if dry. Eating off turnips with sheep is followed by the same result.

6. "*Horse Dung.*" very slightly fermented, I should say, might come next in order for cold lands, and cow dung for hot or dry land; and neither the one nor the other is fugacious in its effects.

7. "*Liquid Manure,*" (urine) is active and powerful, but the effects not lasting.

8. "*Soot*" might have ranked among the first kinds of manure as to activity, if applied to green crops immediately before, or during the time of rain; but soot, like liquid manure, is of an intoxicating quality, producing a rapid growth at the expense of after-crops.

9. "*Bone Dust,*" being now very popular, might have appeared earlier in the list; but, from observing a proportion of human bones, from the trenches of Leipsic and Waterloo, bleaching among others on the surface of turnip fields, I could only bring myself to make one trial before I made the discovery. Those farmers whose feelings allow them to hasten the process of converting the bones of our brave defenders into vegetable matter, may find a powerful auxiliary in bone dust, with little "expense of carriage."

10. "*Lime*" being merely a stimulant, I do not include it in the list; and find my limits prevent me from noticing farther the other odds and ends mentioned by your correspondent.—*Archibald Corrie. Annal Gardens, Oct. 29. 1833.*

The Value of green Vegetables as Manure was strikingly proved by me in the spring of 1833. I had a trench opened of sufficient length to receive six sets of potatoes; under three of these sets I placed green cabbage leaves; but the other three had nothing but the soil. When the crop was dug up, the plants over the cabbage leaves yielded about double the produce of the others.—*J. D. Parkes. Dartford Nursery, Jan. 1834.*

Artificial Lawns.—In answer to Mr. Thomas Woodcock, we have compiled the following from the writings of Mr. Sinclair. The finest English lawns, we are informed by Mr. Sinclair, who had more experience, as he had more science and skill, in this department, than perhaps any man of his time, with the exception of Mr. Lowson, are composed of the following grasses,—*Festuca duriuscula, Festuca ovina, Agrostis capillaris* and vulgaris, *Avena flavescens, Anthoxanthum odoratum, Cynosurus cristatus, Poa pratensis, Lolium perenne*, var. *tenuifolium, Trifolium repens* and minus. If these seeds be sown in April, on a soil thoroughly drained, well pulverised, and properly consolidated by the roller previously to sowing, they will produce a beautiful lawn in two months; and by frequent mowing, in the course of a year, it will be undistinguishable from one of old turf.—*Cond.*

DESTROYING INSECTS BY DECOCTIONS OF CHAMOMILE FLOWERS.—In the *Irish Gardener's Magazine* it is said, not only that decoctions, or the leaves dried and powdered, of the common chamomile (*Anthemis nobilis*) will destroy insects, but that "nothing contributes so much to the health of a garden as a number of chamomile plants dispersed through it. No green-house or hot-house should be without chamomile in a green or in a dried state; either the stalks or flowers will answer. It is a singular fact, that if a plant is drooping and apparently dying, in nine cases out of ten, it will recover, if you place a plant of chamomile near it." Have any of your readers tried the chamomile in any way as a remedy for insects in England?—*John Brown. Westerham, Kent, Feb. 1834.*

TO WOOL GROWERS.—You are particularly requested by the manufacturers not to use cotton twine in doing up the fleeces; the particles of cotton that will inevitably adhere to the wool, takes a different color, which makes specks in the cloth. Marking sheep with tar or turpentine is also very objectionable.

GREAT MINDS SOMETIMES REQUIRE RELAXATION.—David Garrick was once missing from a large company in London. Some of the gentlemen knowing him to be fond of amusement went to look for him. He had found a negro boy, and was imitating a turkey-cock. As soon as the boy would get over one fit of laughter, Garrick would gobble again, the boy said, "do not massa Garrick, make me laugh on, I shall die laughing."

THE GARDENER.**MARYLAND HORTICULTURAL SOCIETY.**

At a meeting of the council held on the 31st May,

The President communicated to the council that he had received from the Agricultural Society of Maryland, a donation in plate, of the value of \$288, on condition that certain specified debts of said Society be liquidated; that the said condition had been complied with, and that he has said plate now in his possession:—when it was moved, and unanimously

Resolved, That the thanks of the Maryland Horticultural Society be presented to the Agricultural Society, for their liberal donation.

Mr. Waters presented seeds of the winter canteloupe, and of the citron water melon, which were distributed to the members present.

The President presented to the Horticultural Society, on behalf of Capt. Nicholson, of the U. S. Navy, 23 varieties of seeds from the Cape of Good Hope.

Mr. Edward Keen, Mr. George Duncan, Mr. Lawrence Ahearn, Mr. James Maidlow, and Mr. Robert Dore, presented 2 quarts each of superior pine strawberries.

The following specimens of Ornamental Plants were exhibited:—

By Mr. Evan P. Thomas, a splendid specimen of Cactus Jenkinsonia, the first in bloom in Baltimore.

By Mr. John Feast, Cactus Speciosus, a very fine plant, with numerous flowers; seeding rose from the Clintonia, very double, Valeriana alba and rubra, Escholtzia Californica, Lupines, Saxefragia umbrosa, Lonicera, Rhododendron ponticum, Campanula persicifolia alba pleno, Coriopsis grandiflora, Hesperis matronalis alba pleno, Hibertia volubilis, Iris anglica, 3 varieties, Salvia officinalis major, Rosa centifolia.

By Mr. Samuel Feast, 3 specimens of double dahlias, 12 varieties of double pink; 6 varieties of musk or cluster roses, 2 of them seedling; 5 varieties of Ayreshire roses, 3 of them seedling, very fine; 12 varieties of seedling garden roses, very fine; 24 varieties of seedling China roses, some fine; 7 varieties of tea roses, 2 seedlings; 30 varieties of China roses; 30 varieties of garden roses; 2 moss roses, red and white; 30 varieties of pelargoniums; 2 varieties of gladiolus: Burchelia capensis, a splendid new plant; Lophospermum scandens; Hokea trinerva; Calceolaria salviolifolia, Potentilla atrosanguinea; Dedimocarpus Rexii; Campanula Siberica; Passiflora alba, and several splendid specimens of humeii or rose color Pæony.

By Mr. Edward Kurtz, Ornathogalum auricum.

By Lawrence Ahearn, ten varieties of carnations.

At a meeting of the Council on Saturday, June 7th, there were presented, the following articles for inspection, at the Horticultural Rooms: 5 heads of early George Cabbage, weighing 14½ lbs, by Thomas Dorsey; some very fine heads were likewise presented by Edward Keene.

2 quarts of excellent strawberries presented by Peter Cooms.

We observed a cluster of Myrtle leaved Oranges, 13 in number, very splendid, presented by

Mrs. Emory. Turnip rooted radishes, and several other articles were presented, which did much credit to the Gardeners.

The Room was elegantly decorated with bouquets of flowers, many of rare and beautiful appearance, mostly from the Garden of Mr. Feast.

We recommend to all Gardeners and Horticulturists, who, having brought their productions to a good state of perfection, and are desirous of having them brought to public notice; or to those, who are desirous of arriving to that state of excellence in their occupation; to attend those weekly exhibitions at the Patapasco building, every Saturday. If properly encouraged, the labors of this spirited Society may be productive of incalculable benefit to the public, as well as to those who follow the business for a livelihood. It is by the free interchange of ideas, and comparison of productions and modes of cultivation, that improvements are most readily effected in all avocations; and particularly so, in all the branches of Agriculture and Gardening.

The following articles were exhibited at the Society's room on Saturday, 14th June.

2 bunches of turnip-rooted beats, remarkably fine, by Thomas French.

3 early bullock-heart cabbages, weighing 10 lb. 2 oz., by Thomas Dorsey.

6 varieties of cherries, Orleans, Kentich, Imperial Duke, Black Halifax, May Duke, by J. B. Bastian.

7 varieties of Gooseberries, by Lawrence Ahearn.

3 varieties of early Gooseberries, viz: early red, early yellow, and golden queen; 2 quarts of seedling Raspberries, and one of a new seedling, by Samuel Feast.

By John Feast, Rhus cotinus, Digitalis lutea and purpurea, Coreopsis lanceolata and grandiflora, Campanula alba plena and single, champany rose, Rosa adamsonia, pink noisette, Hydrangea alba, Achillea spectabile alba, spigellia Marylandica, Ecremocarpus scabra, Argemone alba, colutea lutea, Pelargonium dubricanum, P. Maryana, peltata, inguinous, Waterloo, Lafayette, Duke of Northumberland, and a splendid new seedling.

By Mrs. B. I. Cohen, rosa multiflora, rosa Gre-villii, varieties of carnations.

By Mrs. G. H. Keerl, 10 varieties of carnations.

By Mr. Kurtz, atragena alpina, chelona barbat, Pelargonium Davyanum, P. Russelianum, and Rudbeckia purpurea.

By Samuel Feast, a boquette of Dahlias consisting of 5 seedlings, No. 1, superb purple; 2, scarlet and yellow; 3 scarlet; 4, large crimson; 5, semi-double scarlet; squibs yellow, Amaranth multiflora; 8 varieties of carnation fine, campanula rapunculus, C. medium alba, C. persiciflora plena, C. urticifolia plena, C. Siberica, Delphinium alata, Digitalis lutea, Escholtzia californica, Lophospermum rubescens, Lavatera rosea, clematis Florida plena, Fuschia gracilis, Sprikelia formosissima, calceolaria parilla, C. salviolifolia, Achanea mollis, coreopsis lanceolata, C. Verticellata, rosa noisette V. honganville, Arum dracunculas, Erythrina cristagalli, Ruella formosa, &c.

June 21, the following articles were exhibited:

2 bunches of turnip beats, very fine, by Mr. T. French.

2 bunches of turnip beats, very fine by Mr. Thomas Dixon.

2 fine cucumbers, and ripe tomatoes, by the gardener of Mr. I. I. Hitchcock.

2 bunches of superior beats, and 4 early York cabbages, by George Duncan.

2 bunches beats, by Richard Valentine.

2 pecks of the transparent marrow peas, by James Pitcher.

4 beats, and a white flat turnip, by the gardener of Mr. James Wilson.

10 varieties of gooseberries of large size and high flavor, the largest weighing 263 grains, by Mr. Cray.

A specimen of very fine gooseberries, one kind, by Capt. Thos Holmes.

30 varieties of Gooseberries, 4 varieties of seedling raspberries, 3 varieties of currants, red, white and black, by Mr. Samuel Feast.

A specimen of the Napoleon Bigarreau cherry, resembling the white Orleans, a large fine fruit, by Robert Sinclair, Sen.

Mr. Samuel Feast exhibited 14 seedling pinks, or carnations, 7 old kinds of do., 7 varieties of dahlias, viz: stephenia, William Wallace, Robert Bruce, &c., 14 seedling geraniums, Chandler's royal purple, scutata Florabunda, 3 varieties, gloxinia spiciosa, cantua coronopifolia, anothera lyndliana, St. Helena chamac cyperus, rosa bourbonica, microphylla, and Illinois, dark or black hollyhock, 12 different shades of the hydrangea, and 3 varieties of clematis, viz: viticella, flamula plena, and hybrida.

Mrs. Geo. H. Keerl, clematis viticella, and 15 varieties of carnations.

Mr. Zebulon Waters, 40 varieties of carnations.

Mr. Edward Kurtz, 15 varieties of Carnations, and a specimen of Zephyranthes.

Capt. Thos. Holmes, 36 varieties of Carnations.

Mr. John Feast, 61 varieties of Carnations, Lychnis Chalcidonicum pleno, 3 varieties Delphinium, seedling Pelargoniums from the Waterloo and Navarino, 2 varieties of Veronica Spicata, white French Honeysuckle, yellow Tea Rose, Clintonia and Noisette Roses, Mesembrianthemum Spectabile alba, Morandia Barclayana, Spigelia Marylandica, &c.

PILLARS OF ROSES—One of the prettiest floral fancies of the present day is that of forming pillars of roses. These pillars consist of roses trained on iron stakes, from 12ft. to 15ft. high, well painted; and they form the most durable, as well as the most picturesque, objects in garden scenery. During the ensuing summer, I intend to make an accurate list of all the Noisette roses that are suitable for training in this mode. These, with some of the Ile de Bourbon varieties, added to the already numerous and decided climbing roses, will make a magnificent display. Merely to show how a heap of clay may become a mount of beauty, I last spring levelled and made circular a large quantity of white and blue clay, dug from a pit to contain water: on this, with a small portion of dung and pit sand to each plant, I planted some of all the hardy climbing roses. The effect is now beautiful; and another summer it will be a mount of rose pillars, each from eight to ten feet high.

THE BREEDER & MANAGER.

[From *Dickson's Live Stock Manager.*]

Crossing.—This is the practice and means of supplying the faults or defects of one family or breed of animals from the merits or perfections of another, or uniting the latter in such a manner as to prevent injury, cause improvement, and render them capable of being propagated and continued in the future produce. But it does not by any means follow, on the grounds of either reason or experience, that by the union of distinct breeds such a complete conjoined effect can be produced, as the preserving of the good full properties of each as they separately existed. Since in all such combinations there will be a considerable diminution of the good properties, and some intermixture of the bad: and however desirable the union of the former may be, the conjunction of the latter is no doubt to be apprehended, as being equally liable to take place.

Mr. Wilkinson, an intelligent breeder of cattle stock, in his remarks on Sir J. Sebright's excellent letter, from which we have made such valuable quotations, observes "that which is generally to be expected from mixing the breeds of animals, possessing properties different in degree, is such an union of those properties in the progeny, that they may be greater than in the ancestry of the one side, but less than in that of the other, though the offspring will sometimes nearly resemble one parent only; that in crossing the cart mare with a blood horse, no man expects to obtain from the produce, the strength of the former with the speed of the latter; but an animal that is swifter than the cart horse, though incapable of drawing so great a burden." Still "it does not follow that no cross can be useful; it may be very much so." Thus "for instance, there are many situations which will, it is said, readily suggest themselves to the mind, where an animal with less speed, or less strength, than such a one as might reasonably be expected from the cross in the foregoing example, would by no means be so useful; and yet, where more of either speed or strength would be almost, if not altogether, unnecessary." In other cases, too, "it occasionally happens, that a breed of cattle which is possessed of the greatest excellence, may be too large for the pasturage of a particular situation; and yet a cross from these might obtain a very considerable advantage." Or further, that "a breed, which is unprofitable on the whole, is sometimes kept for the sake of a particular quality, which it possesses in so high a degree, that it would scarcely be the worse if this quality were somewhat diminished;" as is thought to be the case with the Alderney cow; a breed which is kept by some of the nobility and gentry, entirely on account of the richness of the cream; but yet the quantity of milk afforded by them is so small, as to make them extremely unprofitable, even as milkers. It is well known, that the produce of this breed, when "crossed by a well-bred short-horned bull, are generally much better milkers than Alderneys; are more beautiful in their appearance, not being so raw-boned; and frequently come to a very considerable weight." The inference from what has been thus advanced, and

supported by numerous examples, is that "where one breed is inferior to another in each individual point, the worse will generally be improved by the better, not partially, but altogether." But that "where distinct breeds possess their several advantages in different ways, to expect a full and complete union of the good qualities of each, without any mixture of the bad, is to expect a result contrary to the whole analogy of nature," and in direct contradiction to experience.

The same writer, too, is strongly of opinion, that a cross, even "from two distinct breeds," is capable of being "obtained and continued," so as to unite in almost an equal proportion, the properties of both." This, he says, has been seen effected in his vicinity "between the long and short-horned cattle," as "there were many dairies" of the former kind of cows there, descended from the Dishley stock, in favor of which their possessors were greatly prejudiced. "When, however, the improved short-horned cattle began to make such rapid strides," as was the case some time since, "many were willing to try a cross from them," but not to proceed further at that period. "This cross being extremely approved of, they rejected such as inclined too much after the one or the other: and continuing to breed from those that partook of the mean; a breed, usually called half-horned ones, was at length established, as well known by their particular characteristics, as either of the former."

A still further method of crossing, that has often produced very considerable benefit in improving inferior breeds, is, in the view of the same breeder, "by crossing the females of the worse with the males of the better, and their produce again in the same manner, through several succeeding generations. By this method, the blood of the former will be more and more exhausted, and a breed at length obtained nearly resembling the latter;" and that, as it is not seldom the case, that some individuals of the offspring take very greatly after one parent, and some after the other, this end will be approached and "accelerated or retarded, by a judicious or improper selection in each succeeding cross." As, however, the blood of the former or better sort, "though it be less and less in each succeeding generation, can never entirely be taken away; it will follow, 'it is said,' that the value of the produce, at any particular time, must depend partly on the value of the females from whence the cross originally descended."

It is noticed, in support of the same position and practice, by this experienced breeder, that "when the improved short-horns" had become so superior to that of the long, "and prejudice in favor of the latter was borne down by experience;" the cross of the two breeds, as already noticed, and the rest of the long-horned cows, "were put to bulls of the former description, and their produce again, through many generations; the result of which 'proved' that the last crosses, at length so nearly resembled the short-horned cattle, as scarcely to be distinguished from them. The same thing, 'it is said,' has been effected by crossing Scots in like manner, and 'it is not doubted,' it might be produced from any breeds whatever."

Thus though the crossing method of breeding must be allowed to be extremely useful in many

respects, yet the greatest care should be employed by selection, to adapt the animals in the best manner to the nature of the improvement which is required; otherwise the breed may be in danger of sustaining injury instead of advantage.

An experienced anatomist and physiologist has, on these principles, ingeniously endeavored to ascertain in what instances crossing is proper, and in what prejudicial; and the principles upon which the propriety of it depends. "It has been generally supposed, 'he remarks,' that the breed of animals is improved by the largest males. This opinion has done considerable mischief, and would have done more injury if it had not been counteracted by the desire of selecting animals of the best form and proportions, which are rarely to be met with in those of the largest size. Experience has proved, that crossing has only succeeded in an eminent degree, in those instances in which the females were larger, than in the usual proportions of females to males; and that it has generally failed when the males were disproportionately large."

"When a particular variety approaches perfection in form, breeding *in and in* may be the better practice, especially for those who are not well acquainted with the principles on which improvement depends. When the male is much larger than the female, the offspring is generally of an imperfect form. If the female be proportionally larger than the male, the offspring is of an improved form. For instance, if a well-formed large ram be put to ewes proportionally smaller, the lambs will not be so well shaped as their parents; but if a small ram be put to larger ewes, the lambs will be regularly shaped. The proper method of improving the form of animals, consists in selecting a well-formed female, proportionally larger than the male. The improvement depends on this principle, that the power of the female to supply her offspring with nourishment is in proportion to her size, and to the power of nourishing herself from the excellence of her constitution. The size of the fœtus is generally in proportion to that of the male parent, and therefore when the female parent is disproportionately small, the quantity of nourishment is deficient, and her offspring has all the disproportions of a starveling. But when the female, from her size and good constitution, is more than adequate to the nourishment of a fœtus of a smaller male than herself, the growth must be proportionally greater. The larger female has also a greater quantity of milk, and her offspring are more abundantly supplied with nourishment after birth. To produce the best-formed animal, abundant nourishment is necessary, from the earliest period of its existence until its growth is complete.

It is supposed, too, that the power to prepare the greatest quantity of nourishment from a given quantity of food, depends principally on the magnitude of the lungs, to which the organs of digestion are subservient. To obtain animals with large lungs, crossing is the most expeditious method; because well-formed females may be selected from a variety of a large size, to be put to a well-formed male of a variety that is rather small. By such a method of crossing, the lungs and heart become proportionately larger, in consequence of a peculiarity in the circulation of the fœtus, which

causes a larger proportion of the blood, under such circumstances, to be distributed to the lungs than to the other parts of the body: and, as the shape and size of the chest depend upon that of the lungs, hence arises the remarkably large chest which is produced by crossing with females that are larger than the males. This principle of improvement, however, ought to be limited; for it may be carried to such an extent, that the bulk of the body might be so disproportioned to the size of the limbs as to prevent the animal from moving with sufficient facility. In animals where activity is required, this practice should consequently not be extended so far as in those which are intended for the food of man."

In speaking of the characters of animals, or "those external appearances by which the varieties of the same species are distinguished, it may be remarked, that the characters of both parents are noticed in their offspring; but that of the male more frequently predominates. This may be illustrated in the breeding of horned animals; among which, there are many varieties of sheep, and some of cattle, that are hornless. If a hornless ram be put to horned ewes, almost all the lambs will be hornless; partaking of the character of the male more than of the female parent. In some counties, such as Norfolk, Wiltshire, and Dorsetshire, most of the sheep have horns. In Norfolk, the horns may, it is presumed, be got rid of, by crossing with Ryland rams; which would also improve the form of the chest, and the quality of the wool. In Wiltshire and Dorsetshire, the same improvements might be made by crossing the sheep with South Down rams. An offspring without horns might likewise be obtained from the Devonshire cattle, by crossing with hornless bulls of the Galloway breed; which would at the same time improve the form of the chest, in which the Devonshire cattle are often deficient."

These principles are further illustrated by examples to be met with in the great improvement of the breed of horses, which took place in this country, from the practice of crossing with those diminutive stallions, Barbs and Arabians: and the introduction of Flanders mares into this island, was also the source of improvement in the breed of cart-horses."

On the same principles "the form of the swine has likewise, it is believed, been greatly improved, by crossing with the small Chinese boar."

For examples of the bad effects of crossing the breed, we may refer to the practice which was common,—when it became the fashion in London to drive large bay horses:—the farmers in Yorkshire then put their mares to much larger stallions than usual, and thus caused infinite mischief to their breed, by producing a race of small-chested, long-legged, large-boned, worthless animals. A similar project was, it is said, adopted in Normandy, to enlarge the breed of horses there, by the use of stallions from Holstein; and in consequence, the best breed of horses in France would have been spoiled, had not the farmers discovered their mistake in time, by observing the offspring to be much inferior in form to that of the native stallions." Another instance that may be quoted, is that of some gamsters in the Isle of Sheppey, who conceived, that they could improve

their sheep by large Lincolnshire rams, the produce of which, however, was much inferior in the shape of the carcase, and the quality of the wool; and their flocks were greatly injured by this attempt to improve them. Attempts to improve the native animals of a country, by any plan of crossing, should always be made with the greatest caution; for, by a mistaken practice, extensively pursued, irreparable mischief may be done. In any country, where a particular race of animals has continued for centuries, it may be presumed, that their constitution is adapted to the food and climate. The pliancy of the animal economy is such, that an animal will gradually accommodate itself to great vicissitudes in climate and alterations in food; and by degrees, will thus undergo great changes in constitution; but these changes can be effected only gradually, and may often require a great number of successive generations for their accomplishment. It may be proper to improve the form of a native race, but at the same time it may be very injudicious to attempt to enlarge their size."

The size of animals is commonly adapted to the soil which they inhabit. Where the produce is nutritive and abundant, the animals are large, having grown proportionally to the quantity of food, which, for generations, they have been accustomed to obtain. Where the produce is scanty, the animals are small, being proportioned to the lesser quantity of food which they were able to procure. Of these contrasts, the sheep of Lincolnshire and of Wales, are examples. The sheep of Lincolnshire would starve on the mountains of Wales."

It is further noticed, that "crossing the breed of animals may be attended with bad effects in various ways; sometimes even when adopted in the beginning, on a good principle; for instance, suppose some larger ewes than those of the native breed were taken to the mountains of Wales, and put to the rams of that country; if these foreign ewes were fed in proportion to their size, their lambs would be of an improved form, and larger in size than the native animals; but the males produced by this cross, though of a good form, would be disproportionate in size to the native ewes; and, therefore, if permitted to mix with them, would be productive of a starveling, ill-formed progeny. Thus a cross which at first was an improvement, would, by giving occasion to a contrary cross, ultimately prejudice the breed. The general mistake in crossing has arisen, it is believed, from an attempt to increase the size of a native race of animals; being a fruitless effort to counteract the laws of nature."

The Arabian horses are, in general, the most perfect in the world; a superiority which probably has arisen from great care in selection, and also from being unmixed with any variety of the same species; the males, therefore, have never, it is supposed, been disproportioned in size to the females."

"The native horses of India are small, but well-proportioned, and good of their kind. With the intention of increasing their size, the India company have adopted a plan of sending large stallions to India. If these stallions should be extensively used, a disproportioned race must be the result, and a valuable breed of horses may be

irretrievably spoiled. In short, from theory, from practice, and from extensive observation, which is more to be depended on than either, it is reasonable to form this conclusion, that it is wrong to enlarge a native breed of animals, for in proportion to their increase of size, they become worse in form, less hardy, and more liable to disease."

The practice of crossing ought, therefore, to be well considered and carefully attended to by the breeder and improver of live stock.

MISCELLANEOUS.

EMIGRANTS.—During the past seventeen years there have arrived at the port of Quebec 69,175 passengers from Europe. The greatest number in one year was 18,231—the least number was 90, in 1824.—The number arrived the present season, to the 3d of June, was, from England 2,884, Ireland 6,595, Scotland 1,343, lower ports 19—total 10,846. Same period last year, 3,175.

The following are the number of passengers that have arrived at the port of New York, since the first of January, 1834, to June 4th, as taken from the revenue books.

January,	420
February,	460
March,	1454
April,	3959
May,	9653
June,	809
Total,	16,753

Poulson's Adv.

ASTHMA.—We learn from an intelligent friend who has long been afflicted with this most distressing complaint, that the fumes of burning paper, saturated with a solution of saltpetre, gives him perfect relief. He keeps a quantity of the paper, which has been simply soaked in strong saltpetre water, and afterwards dried, constantly on hand, and on the recurrence of a paroxysm obtains almost instant relief from burning half a sheet or a sheet in his room. Others who have been similarly affected, have tried it with corresponding benefit. In no case has it been known to fail, so far as his information extends. We deem the testimony sufficient to warrant the publication of the prescription, which certainly has the merit of simplicity. If it shall prove generally efficacious, its value is beyond price. It can be readily tested.—*Newark Daily Adv.*

A swarm of bees contain from 10,000 to 20,000 in a natural state, and from 30,000 to 40,000 in a hive.—*N. Brunswick Times.*

CONTENTS OF THIS NUMBER.

Death of Lafayette—Machine for applying Liquid Manure—Destruction of the Elm Tree—Letter from Morgan Lewis, relative to the Crowfoot grass—Editor's remark on the same—New Zealand Flax—Preservation of Skins—Manufacturing of Silk—Management of Sandy Soils—Gama Grass; letter from William Ellison on the subject—Suggestions relative to the use of Ashes of Salt-Marsh as a manure, by N. Herbolmont—Relative degrees of effect on vegetation of several sorts of manure—Destroying Insects by decoctions of Chamomile Flowers—To Wool Growers—Great minds require relaxation—Exhibitions of the Maryland Horticultural Society—Pillars of Roses—Crossing in breeding cattle—Emigrants at Quebec and New York—Asthma—Bees.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM.	TO.
BRANDY, Apple,.....	gallon.	\$0 27	—
Peach,.....	"	75	—
BEANS, white field,.....	bushel.	2 00	—
BEEF, on the hoof,.....	100lbs.	6 30	—
CORN, yellow,.....	bushel.	66	67
White,.....	"	66	67
COTTON, Virginia,.....	pound.	10	14
North Carolina,.....	"	11	12 1/2
Upland,.....	"	11	14
FEATHERS,.....	pound.	—	37
FLAXSEED,.....	bushel.	1 00	1 25
FLOUR—Best white wheat family,.....	barrel.	6 50	7 00
Do. do. baker's,.....	"	5 75	6 25
Do. do. Superfine,.....	"	5 00	5 25
Super Howard street,.....	"	4 94	5 00
" " wagon price,.....	"	4 75	—
City Mills, extra,.....	"	5 37	5 50
Do.	"	5 12	5 25
Susquehanna,.....	"	5 25	—
Rye,.....	"	3 37	—
GRASS SEEDS, red Clover,.....	bushel.	—	4 50
Timothy (herds of the north).....	"	3 50	—
Orchard,.....	"	3 00	—
Tall meadow Oat,.....	"	2 50	—
Herds, or red top,.....	"	1 25	—
HAY, in bulk,.....	ton.	15 60	16 00
Pressed,.....	100 lbs.	—	90
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	8
LIME,.....	bushel.	30	35
MUSTARD SHED, Foreign,.....	"	4 50	5 00
Domestic,.....	"	5 00	—
OATS,.....	"	31	32
OIL, linned,.....	gallon.	85	90
CASTOR,.....	"	1 70	1 80
PEAS, red eye,.....	bushel.	—	—
Black eye,.....	"	—	1 50
Lady,.....	"	—	—
PLASTER PARIS, in the stone,.....	ton.	3 25	—
Ground,.....	barrel.	1 37	—
PALMA CHRISTA BEAN,.....	bushel.	2 00	—
RAGE,.....	pound.	3	4
RYE,.....	bushel.	71	—
TOBACCO, crop, common,.....	100 lbs.	3 50	5 00
" brown and red,.....	"	4 50	6 00
" fine red,.....	"	6 00	8 00
" wrappery, suitable.....	"	—	—
" for segars,.....	"	6 00	12 00
" yellow and red,.....	"	8 00	12 00
" yellow,.....	"	13 00	17 00
" fine yellow,.....	"	15 00	22 00
Seconds, as in quality,.....	"	4 00	5 00
" ground leaf,.....	"	5 00	9 00
Virginia,.....	"	4 00	—
Rappahannock,.....	"	3 00	4 00
Kentucky,.....	"	4 00	8 00
WHEAT, white,.....	bushel.	1 20	—
Red,.....	"	1 00	1 06
WHISKEY, 1st pf. in bbls,.....	gallon.	26	—
" in hhd,.....	"	23 1/2	—
" wagon price,.....	"	20	—
WAGON FREIGHTS, to Pittsburgh,.....	100 lbs.	1 50	—
To Wheeling,.....	"	1 25	—
WOOL, Prime & Saxon Fleeces,.....	pound.	50 to 60	24 to 26
Full Merino,.....	"	40	50 20 24
Three fourths Merino,.....	"	33	40 18 20
One half do,.....	"	27	33 16 18
Common & one fourth Meri,.....	"	22	27 16 18
Pulled,.....	"	25	30 16 18

There has been but little done this week in Clover seed. Sales have been effected in small quantities at \$4.50;—but the greater part now on hand is stored, and limited at \$5. HERRINGS are going at the last quotations, but more firm.

BUCKWHEAT.

THIS article is very scarce and high in price in our market this summer. I have however obtained a small quantity for seed, which I offer to my customers at \$1 50 per bushel. I. I. HITCHCOCK, June 17. American Farmer Establishment.

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.	—	—
BACON, hams,.....	pound.	11	—
Shoulders,.....	"	—	8 1/2
Middlings,.....	"	—	8 1/2
BUTTER, printed, in lbs. & half lbs.	"	18	25
Roll,.....	"	12	18 1/2
CIDER,.....	barrel.	—	—
CALVES, three to six weeks old,.....	each.	3 00	6 00
COWS, new milch,.....	"	15 00	27 00
Dry,.....	"	9 00	12 00
CORN MEAL, for family use,.....	100lbs.	1 50	1 56
CHOP RYE,.....	"	1 56	1 62
EGGS,.....	dozen.	11	—
FISH, Shad, trimmed,.....	barrel.	6 37	—
" salted,.....	"	3 87	—
HERRINGS, salted, No. 1 & 2,.....	"	4 00	6 25
Mackerel, No. 1, 2 & 3,.....	"	—	—
Cod, salted,.....	pound.	3	—
LAMBS, alive,.....	each.	1 25	2 00
Slaughtered,.....	quart'r	37 1/2	75
LARD,.....	pound.	8	—
POULTRY, Fowls,.....	dozen.	3 50	—
Chickens,.....	"	1 75	—
Ducks,.....	"	—	—
POTATOES, Irish,.....	bushel.	75	—
New,.....	peck.	50	—
VEAL, fore quarters,.....	pound.	6	—
Hind do,.....	"	8	—

ADVERTISEMENTS.

THE COMPLETE FARMER.

JUST PUBLISHED and for sale at this establishment, price \$1, "The Complete Farmer and Rural Economist, containing a Compendious epitome of the most important branches of Agriculture, and Rural Economy. By Thomas G. Fessenden, Editor of the New England Farmer." "Agriculture is the art of arts: without it man must be a savage, and the world a wilderness." June 24

IN a season like the present when the grass crops are not so abundant as usual, MILLET must be deemed by the farmer an important and eligible substitute. With this view I have procured a small quantity of the seed, which I offer for sale at \$1 50 per bushel.

I have also as usual a full supply of Ruta Baga, white flat and many other kinds of TURNIP SEED, which I believe is of first quality. Also Early French, Early York, Early George, Early Sugarloaf, and sundry other kinds of CABBAGE SEED, which I know to be genuine. Also, a full and general assortment of GARDEN SEED, including nearly every article in that line.

I. I. HITCHCOCK,

June 17.

American Farmer Establishment.

DALE'S NEW HYBRID TURNIP.

THE subscriber now offers to the agriculturists a new and decidedly superior variety of Turnip, originated by R. Dale, esq. an intelligent farmer, near Edinburgh, Scotland; it was obtained by unwearied attention in crossing the Swedish or Ruta Baga Turnip; it is superior in size and flavor to the Ruta Baga; is closer and finer in the texture; it is rapid in its growth as the White Flat Turnip. In fact, it includes the great desideratum in the selection of a proper variety of the Turnip which is to obtain the greatest possible weight at a given expense of manure. This variety seems to be more adapted to this end than any other sort introduced; it will be found superior in quality to any of the White Field Turnips, and keeps longer than any of them, and very near as long as the Ruta Baga—the color is yellow—the shape oblong. Price 25 cents per ounce. The season for sowing is at hand.

I. I. HITCHCOCK,

June 10

Amer. Farm. Estab.

IMPROVED STOCK.

FOR SALE—A full blood Durham improved short horned BULL, two half blood yearling BULLS, also several half and three quarter blood HEIFERS of different ages. These cattle are immediately descended from the stock of the late R. Colling (of England) a celebrated breeder.

Apply to the Editor, or at the farm of the proprietor, near Taneytown, Frederick county, Maryland. May 30 41 C. BIRNIE

THE 7-8 SHORT HORN DURHAM BULL "DUKE" IS FOR SALE.

DUKE is 2 years old, red and white, by Parson, dam Isabella; Parson is by Bishop, dam, Moss Rose, (imported in 1821, bred by Mr. Ashcroft,) got by Phenomenon—Isabella is by the celebrated imported bull Lothario, dam, Meg, by Billy Austin. Duke is of uncommon fine size and figure, pronounced by judges to have every point and appearance of a full bred. Price (to suit the times) \$150.

Also—Several 3-4 blood HEIFERS, with their first calves, will be disposed of at \$100 each. Application to be made (post paid) to I. I. HITCHCOCK, May 30 American Farmer Establishment.

NOTICE.

I WILL sell my FARM on South River, at private sale. It contains upwards of a THOUSAND ACRES,

and possesses more advantages than most farms. Any information which may be required will be afforded to those who will call upon me at my residence in this city, or on H. H. Harwood, Esq. at the Farmers' Bank of Maryland. RICHARD HARWOOD of Thos.

Annapolis, May 30, 1834.

GREY SULPHUR SPRINGS, OF VIRGINIA.

THE Subscriber having purchased this Spring, has erected Buildings for the accommodation of a small Company, the present season; and contemplates making such other improvements as may become necessary.

THIS SPRING is situated near the celebrated and fashionable Sulphur Springs of Virginia, being 9 miles from the Red Sulphur, 33 miles from the Salt Sulphur, and but three quarters of a mile from Petersstown. In consequence of the small quantity of water hitherto yielded by this Spring, it attracted but little notice, and was known but to the immediate neighbourhood. Having opened the rock through which it flows, a large supply has been obtained, sufficient for the use of several hundred visitors.

The water is beautifully clear and cool, and leaves a greyish deposit, with a slight tinge of red on the surface, similar to that of the Red Sulphur Spring. Some of the water taken from the Spring and analyzed, has been found to contain the following ingredients—some of them in considerable quantities, viz: Carbonate of Soda, Carbonate of Lime, Sulphate of Soda, Oxide of Lithion, Oxide of Selenium, and Sulphuretted Hydrogen Gas—which, at the Spring, is in such quantities as to rise in bubbles. It is highly probable that other ingredients, which are in smaller quantities, will be found, on an analysis being made at the Spring, as the quantity of water brought away, did not permit of as minute an examination, as is necessary to determine whether other ingredients are not also held in solution. Those physicians to whom this analysis has been submitted, have given it as their opinion, that these waters will prove especially beneficial in Dyspeptic cases, as well as other diseases. It is also highly probable from some experiments which have been made, that these waters may be alternated with those of the Red Sulphur Springs with much effect. There is a Post-Office at Petersstown, to which all letters should be directed.

Persons from the lower part of the Southern States, wishing to visit these Springs, should take the route by Charlotte, Salisbury and Salem, North-Carolina, and from the latter place, cross over by "Goods" Gap, to Newbern, and from thence to Giles Court-House and Petersstown. This is the shortest and believed to be as good, if not better than any other. The route through Tennessee to Newbern, may also be taken, but is longer.

The accommodations and style of living, as far as practicable, will be made to conform, to that usually found in the private families of the Southern States.

JOHN D. LEGARE.

Charleston, So. Ca. May 1, 1834—June 6.

DEVON CATTLE.

THE subscriber has the selling of a considerable number and variety of these valuable cattle at prices unusually low, viz: Bulls from 75 to \$100; Cows and Heifers from 60 to \$50, and Calves, one year old and less, from 40 to \$60. More particular information may be had by application to I. I. HITCHCOCK, May 9. American Farmer Establishment.

WANTED.

BUCKWHEAT FOR SEED, by I. I. HITCHCOCK, May 9. American Farmer Establishment.